

# **APPENDIX B**

## **OUTPUTS FROM META.AI**

https://www.meta.ai

How many pages of text would be in 267 TB of books?

To estimate the number of pages, we'll need to make a few assumptions.

- Average book size: 250-300 pages (we'll use 275 pages)
- Average storage size per page: 100-150 KB (we'll use 125 KB)

Now, let's do some calculations:

1 TB = 1,000,000,000,000 bytes (or 1 trillion bytes)  
267 TB = 267,000,000,000,000 bytes

Assuming 125 KB (125,000 bytes) per page:

267,000,000,000,000 bytes / 125,000 bytes per page ≈ 2,136,000,000 pages

Now, let's convert this to the number of books:

2,136,000,000 pages / 275 pages per book ≈ 7,775,455 books

So, approximately 7.78 million books or 2.14 billion pages of text would be equivalent to 267 TB of storage.

https://www.meta.ai

Meta AI

New conversation

How tall would 2.14 billion pages of text be if stacked?

To estimate the height, we'll need to make an assumption about the thickness of a single page.

- Average thickness of a page: 0.003-0.005 inches (we'll use 0.004 inches)

Now, let's calculate the total height:

$2,136,000,000 \text{ pages} * 0.004 \text{ inches per page} = 8,544,000 \text{ inches}$

There are 12 inches in 1 foot, so:

$8,544,000 \text{ inches} / 12 = 712,000 \text{ feet}$

There are 5,280 feet in 1 mile, so:

$712,000 \text{ feet} / 5,280 = \text{approximately } 135 \text{ miles}$

So, if we stacked 2.14 billion pages of text on top of each other, the height would be approximately **135 miles**.

For perspective:

- The Karman line, the internationally recognized boundary between the atmosphere and outer space, is at an altitude of approximately 62 miles.
- The highest mountain, Mount Everest, is approximately 5.5 miles high.

Our stacked pages would be roughly 2.2 times higher than the Karman line!